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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,654	10/13/2000	Dan Molander	082329/0103	6641

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EXAMINER

CASTELLANO, STEPHEN J

ART UNIT PAPER NUMBER

3727

DATE MAILED: 12/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/687,654

Applicant(s)

MOLANDER, DAN

Examiner

Stephen J. Castellano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 18.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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It is noted that the present invention provides panels made of a different plastics material than the hinge elements. The reverse statement, however, is not true. The hinge elements can't be formed from a different plastics material than the panels because the panels when molded encapsulate or impregnate a portion of the hinge element material and therefore, portions of the panels are formed from the identical plastics material as the hinge elements.

Applicant has not properly claimed priority to the Singapore application since the word "NIL" appears below Priority Claimed in the priority section of applicant's declaration. The word "nil" means nothing or zero.

Note that none of the previous actions have acknowledged the priority claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 8, 9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Focke et al. (Focke).

Focke discloses a box blank formed from a plastics material and comprising a net (30) of hinge elements of a first plastics material and a plurality of panels (11-14, 16-19 and 21-24) of a second plastics material for forming sides of a box, the panels being located in spaces between surrounding hinge elements of the net and fused to the surrounding hinge elements.

For claims 8, 9 and 16, all the panels are considered to be both structural panels and load bearing panels. The blank once constructed into a box will have vertical hinges or hinge elements formed parallel (or not perpendicular) to the intended direction of load support when more than one boxes are stacked. The box could be reoriented such that hinged bottom and top

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panels would be vertically extending with the top and bottom positioned front-to-back or side-to-side.

Claims 1-3, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Delamour et al. (Delamour).

Delamour states that hinge means 15 comprises a resilient material piece 16 fixed rigidly to the lateral elements on the one hand and to the base on the other (see Fig. 6, only one piece 16 is designated). Also, the specification at column 6, lines 31-39, indicates that piece 16, keyboard 18 and paths 22 are injection molded of the same elastomer material in a second of a two set operation. This would correspondingly indicate that piece 16 is a one-piece net.

For claims 8 and 9, all the panels are considered to be both structural panels and load bearing panels. The blank once constructed into a box will have vertical hinges or hinge elements formed parallel (or not perpendicular) to the intended direction of load support when more than one boxes are stacked. The box could be reoriented such that hinged bottom and top panels would be vertically extending with the top and bottom positioned front-to-back or side-to-side.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 7, 11, 13, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Focke in view of Lewallen and Delamour.

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For claims 2 and 3, Focke discloses the invention except for the net of hinge elements being formed from a first plastics material having a greater toughness but less rigidity than the second plastics material forming the panels. Lewallen teaches a unitary box blank formed from plastics material and comprising a plurality of hinge elements connecting and fused to a plurality of panels for forming sides of the box, the hinge elements being formed from a different plastics material than the panels because the hinge is either formed from polypropylene, high density polyethylene or ethylenebutene copolymers, only, while the panel has a laminated structure wherein only a central layer is made of the same material as the hinge and the other layers can include foamed polyethylene as an insulating layer or layers and skin layers which could include Mylar, acrylonitrile-butadiene-styrene (ABS) copolymer, or virtually any other material.

Delamour teaches net material of elastomer containing butadiene and styrene for connecting elements of acrylonitrile-butadiene-styrene (ABS) polymer. It would have been obvious to form the net of a plastics of greater toughness but less rigidity than the plastics of the panel.

For claims 7 and 13, Focke discloses the invention except for the projections. Lewallen teaches a hinge with thicker portions proximate to the panels being connected and a thinner portion at the center of the hinge. The thicker portions form projections. It would have been obvious to modify the hinge elements of Focke to have projections to provide more precise and accurate folding of the hinge to create a container that has better aligned panels when the hinge elements are folded and the container is in an erect configuration.

For claims 11, 14 and 17, Focke discloses the invention except for the polyethylene materials. Lewallen teaches polyethylene hinges and panels. It would have been obvious to

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modify the material to be polyethylene as a lower cost and easier moldable material than polycarbonate.

Claims 2, 4, 6, 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Focke or Focke in view of Lewallen and Delamour in view of Reuter, Jones, Darras and Miller.

Focke and Focke in view of Lewallen and Delamour disclose the invention except for the materials of rubber-modified polyethylene and rubber-modified polypropylene. Reuter teaches rubber-modified polypropylene as a flexible hinge material. Jones teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material for flexibility and gas and water impervious properties. Darras teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material. Miller teaches the equivalent materials of rubber-modified polyethylene and rubber-modified polypropylene. It would have been obvious to modify the polyethylene or polypropylene of the hinge element of Lewallen to be either rubber-modified polyethylene or rubber-modified polypropylene to provide a flexible yet gas and water impervious barrier for a hinge to keep water either out of the box or inside of the box and to prevent contamination.

Claims 2, 4, 6, 10, 11 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delamour in view of Lewallen, Reuter, Jones, Darras and Miller.

Delamour disclose the invention except for the materials of rubber modified polypropylene, polypropylene, polyethylene and rubber modified polyethylene for the hinge element and polypropylene and polyethylene for the panels. Lewallen teaches both polyethylene and polypropylene for both the hinge and panels. Reuter teaches a lid which has flexible hinge portions, the entire lid is made of rubber modified polypropylene. Reuter teaches rubber-

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modified polypropylene as a flexible hinge material. Jones teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material for flexibility and gas and water impervious properties. Darras teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material. Miller teaches the equivalent materials of rubber-modified polyethylene and rubber-modified polypropylene. It would have been obvious to modify the hinge elements to be polyethylene, polypropylene, rubber modified polypropylene or rubber modified polyethylene in order to provide a flexible material which is durable as well. It would have been obvious to make the panels polyethylene or polypropylene in order to provide a durable and easily cleanable surface.

Applicant's arguments filed November 10, 2003 have been fully considered but they are not persuasive. Applicant states that it can be clearly seen in both Focke Fig. 2 and 3 and Delamour Fig. 6 that the hinge elements are discontinuous. This statement is not well taken, since Focke Fig. 1 and 2 and Delamour Fig. 6 clearly show continuity. It is noted that Focke Fig. 3 is a cross section in which continuity would not be expected to be shown.

Applicant states that the entire body of prior art doesn't disclose hinge elements encapsulated by and fused to adjacent panels. This statement is not well taken. Figure 4 of Focke discloses encapsulation and Focke's specification at column 3, lines 13-16 discuss that the edges 31 and 32 of the walls are pressed and sealed together with the hinge strips under the effect of heat. Figures 1-4 of Delamour disclose encapsulation and the Delamour's specification at column 5, lines 20-21 discuss that the piece 4 is molded in elements 2 and 3 before final solidification.


All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at (703)872-9302. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into group 3720 will be promptly forwarded to the examiner.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is (703)-308-1035.


Stephen Castellano
Primary Examiner
Art Unit 3727